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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/713,734

11/13/2003

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AUS920030636US1

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12/05/2008

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EXAMINER

DEBROW, JAMES J

ART UNIT

PAPER NUMBER

2176

MAIL DATE

DELIVERY MODE

12/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

This action is responsive to communications: Amendments filed 24 Sep 2008.

Claims 1, 3-10, 12-14, 23 and 25-31 are pending in this case. Claims 1 and 23 are independent claims.

Applicant's Response

In Applicant's Response dated 24 Sep 2008, Applicant amended claims 1, 3, 10, 13, 23, 25, 28, 29 and 30; cancelled claims 2 and 24; Applicant argued against all rejections previously set forth in the Office Action dated 12 Aug. 2008.

Claim Objections

Claims 1 and 23 are objected to because of the following informalities:

- In Claim 1, the phrase "*the repository having the software instructions that implement validation rules linked to records in the repository that correspond to each validation rule;*" in Line 6 should be amended to — the repository having software instructions implementing validation rules linked to records in the repository and corresponding to each of the validation rules;— because the "*software instructions*" are not previously mentioned and so that it is clear that the recited "*software instructions*" implement validation rules and correspond to each of the validation rules. Claim 23 has the same problem.
- In Claim 23, the phrase "*automatically installing software instructions that execute the selected validation rule*" in Line 22 should be amended to — automatically installing the corresponding software instructions that execute the

selected validation rule — because the recited “*software instructions*” are previously recited in the claim (see Line 5) and because that is how the element is previously identified (see Lines 4-6).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-10, 12-14 and 23, 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morscheck et al. (Patent No.: 6,076,080; Filing Date Nov. 4, 1997) (hereinafter “Morscheck”), in view of Larcheveque et al. (Pub. No.: US 2004/0189708 A1; Filing Date: Mar. 28, 2003) (hereinafter “Larcheveque”) further in view of Tsao (Patent No.: US 7,376,895 B2; Filing Date: Nov. 8, 2002) (hereinafter “Tsao”).

Regarding independent Claims 1 and 23, Morscheck discloses *a computer implemented method for selecting rules from a rules repository to validate information submitted on an electronic form comprising the steps of:*

a) creating a validation rules repository on a computer (col. 1 , lines 35-51;

Morscheck discloses a validation rules repository on a computer.).

b) in response to receiving a connection request, establishing a connection with the created rules repository (col. 1 , lines 52-65; col. 23 , lines 53-67; Morscheck discloses the second computer is remote from the first computer and in communication with the first computer and is programmed to validate the forms order by comparing the form design data with a set of validation rules. Thus, in response to receiving a connection request, establishing a connection with the created rules repository.).

c) receiving a rule request (col. 1 , lines 52-65; col. 23 , lines 53-67; Morscheck discloses the second computer is remote from the first computer and in communication with the first computer and is programmed to validate the forms order by comparing the form design data with a set of validation rules. Therefore Morscheck discloses receiving a rule request.).

d) receiving a validation rule description (col. 1, lines 52-65; col. 23, lines 53-67; Morscheck discloses the second computer is remote from the first computer and in communication with the first computer and is programmed to validate the forms order by comparing the form design data with a set of validation rules. Therefore it would have been obvious that the step of *receiving a validation rule description* would occur during when comparing the form design data with a set of validation rules.).

e) searching the rules repository for rules matching the rule description (col. 1, lines 52-65; col. 23, lines 53-67; Morscheck discloses the second computer is remote from the first computer and in communication with the first computer and is programmed

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to validate the forms order by comparing the form design data with a set of validation rules. Therefore it would have been obvious that the step of *searching the rules repository for rules matching the rule description* would occur during when comparing the form design data with a set of validation rules.).

f) determining whether there are any rules that match the validation rule description (col. 1, lines 52-65; col. 23, lines 53-67; Morscheck discloses the second computer is remote from the first computer and in communication with the first computer and is programmed to validate the forms order by comparing the form design data with a set of validation rules. Thus determining whether there are any rules that match the validation rule description.).

Morscheck discloses an error log/error message, which provide instructions how to correct the error for each fields for which invalid data was detected. Morscheck does not expressly disclose:

a) the repository having the software instructions that implement validation rules linked to records in the repository that correspond to each validation rule

g) sending a query to the user to create a new rule when no rule matches the validation rule description and storing the created rule in the rules repository; and

h) instructions displaying at least one rule from the rules repository in response to a rule request;

i) retrieving the selected rule from the rules repository for incorporation into the electronic form.

j) automatically installing software instructions that execute the selected validation rule on a web page.

Larcheveque teaches:

g) sending a query to the user to create a new rule when no rule matches the validation rule description and storing the created rule in the rules repository (0035; 0041; 0072-0075; 0098-0102; Larcheveque teaches a real-time validation tool which alerts the user through an alert containing information, such as a dialog box in a pop-up window. The pop-up window has various options, one of which including an option to add a custom validation rule. Using the broadest reasonable interpretation, the Examiner concludes the displaying of the pop-up window is analogous to sending a query to the user.).

h) instructions displaying at least one rule from the rules repository in response to a rule request (0107-0109; Larcheveque teaches displaying a list of preset validation rules through a prelist validation list.).

i) retrieving the selected rule from the rules repository for incorporation into the electronic form (0091; Larcheveque teaches the validation tool enables the developer to create custom rules by allowing the developer to choose from preset validation rules. Thus, retrieving the selected rule from the rules repository for incorporation into the electronic form.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of

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creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Larcheveque does not expressly disclose:

a) the repository having the software instructions that implement validation rules linked to records in the repository that correspond to each validation rule.

j) automatically installing software instructions that execute the selected validation rule on a web page.

Tsao teaches:

a) the repository having the software instructions that implement validation rules linked to records in the repository that correspond to each validation rule (col. 9, lines 49-67; col. 24, lines 1-11; Tsao teaches a data object repository system (DOORS) in which data objects contains link, attributes and information about operations and how these operations are applied to the linked data object to arrive at respective values or content of such data objects, for example links to components may be included in desk top publishing pages and formatting requirements for composing a final page. Tsao also teaches a data form may be automatically generated from a database schema information, and the fields in the data form may contain various validations rules based on data in the DOORS system. Thus Tsao teaches the repository having the software instructions that implement validation rules linked to records in the repository that correspond to each validation rule.).

j) automatically installing software instructions that execute the selected validation rule (col. 24, lines 1-11; Tsao teaches a data form may be automatically generated from a database schema information, and the fields in the data form may contain various validations rules based on data in the DOORS system. Thus Tsao teaches automatically installing software instructions that execute the selected validation rule.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Tsao with Morscheck in view of Larcheveque for the benefit of providing a repository wherein data objects contain link type code. (col. 4, lines 58-59; col. 9, lines 49-55).

Regarding dependent Claims 3 and 25, Morscheck discloses *the method as described in claims 1 and 25 wherein said step (a) further comprises establishing a plurality of categories of rules and storing the rules in the plurality of categories according to rule type* (col. 25, lines 56-63; Morscheck discloses validations rules fall into two classes, the general validation rules and the specific product validation rule.).

Regarding dependent Claim 4, Morscheck does not expressly disclose *the method as described in claim 3 wherein rule categories comprise alphabet and number categories*.

Larcheveque teaches *wherein rule categories comprise alphabet and number categories* (0101-0105; Larcheveque teaches two categories of rules, preset custom

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validation rules and script-based validation rules. Larcheveque also teaches many types of preset validation rules are available by the system, such as rules that require data entered to be a numbers or text.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Regarding dependent Claim 5, Morscheck discloses *the method as described in claim 3 wherein rule types comprise name, zip code, telephone number, city, state and address, and credit card number* (col. 8, lines 1-52; Morscheck discloses an order entry system which contains validations rules for validating customer information. Using the broadest reasonable interpretation, the examiner concludes the customer information to include but not be limited to name, zip code, telephone number, city, state and address, and credit card number.).

Regarding dependent Claims 6 and 26, Morscheck discloses validations rules fall into two classes, the general validation rules and the specific product validation rules (col. 25, lines 56-63). Morscheck does not expressly disclose *the method as described in claim 3 wherein said displaying step further comprises displaying a category of validation rules*.

Larcheveque teaches *displaying a category of validation rules* (0101-0105; 0107-

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0109; Larcheveque teaches two categories of rules, preset custom validation rules and script-based validation rules. Larcheveque also teaches displaying a list of preset validation rules through a prelist validation list.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Regarding dependent Claims 7 and 27, Morscheck does not expressly disclose *the method as described in claim 6 further comprising before said displaying step, the step of receiving the rule request containing an identification of a specific validation rules category.*

Larcheveque teaches *the step of receiving the rule request containing an identification of a specific validation rules category* (0101-0102; Larcheveque teaches the developer can choose to add a preset validation rule by selecting an add preset rule button or the developer can choose to add a script-based validation rule by selecting either of two events in an event box. Thus, Larcheveque teaches the step of receiving the rule request containing an identification of a specific validation rules category.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Regarding dependent Claim 8, Morscheck does not expressly disclose *the method as described in claim 7 wherein said displaying step further comprises displaying only rules from the identified validation rules category.*

Larcheveque teaches *displaying only rules from the identified validation rules category* (0101-0105; 0107-0109; Larcheveque teaches two categories of rules, preset custom validation rules and script-based validation rules. Larcheveque also teaches displaying a list of preset validation rules through a prelist validation list.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Regarding dependent Claim 9, Morscheck does not expressly disclose *the method as described in claim 8 wherein said rule retrieval step further comprises receiving an identification of a rule in the specific validation rules category and retrieving the identified rule from the rules repository.*

Larcheveque teaches *displaying a category of validation rules* (0101-0105; 0107-0109; Larcheveque teaches the developer can choose to add a preset validation rule by selecting an add preset rule button or the developer can choose to add a script-based validation rule by selecting either of two events in an event box. Thus, Larcheveque teaches the step of receiving the rule request containing an identification of a specific

validation rules category. Larcheveque also teaches displaying a list of preset validation rules through a prelist validation list.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Regarding dependent Claim 10, Morscheck discloses *the method as described in claim 1 wherein said step (h) further comprises the steps of:*

receiving a description of a desired rule (col. 1 , lines 52-65; col. 23 , lines 53-67; Morscheck discloses the second computer is remote from the first computer and in communication with the first computer and is programmed to validate the forms order by comparing the form design data with a set of validation rules. Therefore it would have been obvious that the step of *receiving a validation rule description* would occur during when comparing the form design data with a set of validation rules.).

Morscheck does not expressly disclose *displaying all rules matching the rule description; and*

retrieving a rule selected from the displayed rules matching the rule description.

Larcheveque teaches *displaying all rules matching the rule description* (0095-0102; 0107-0109; Larcheveque teaches a real-time validation tool which allows the

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developer to choose a validation rule from a list or preset validation rules or create validation rule for a data-entry field in an electronic form. Larcheveque further teaches displaying a list of preset validation rules through a prelist validation list.).

retrieving a rule selected from the displayed rules matching the rule description (0095-0102; 0107-0109; Larcheveque teaches a real-time validation tool which allows the developer to choose a validation rule from a list or preset validation rules or create validation rule for a data-entry field in an electronic form. Larcheveque further teaches displaying a list of preset validation rules through a prelist validation list.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Regarding dependent Claim 12, Morscheck does not expressly disclose *the method as described in claim 1 further comprising the step of storing the newly created rule in the rule repository.*

Larcheveque teaches *the method as described in claim 1 further comprising the step of storing the newly created rule in the rule repository* (0035; 0041; 0072-0075; 0098-0102; Larcheveque teaches a real-time validation tool which alerts the user through an alert containing information, such as a dialog box in a pop-up window. The pop-up window has various options, one of which including an option to add a custom validation rule. Thus, storing the newly created rule in the rule repository.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Regarding dependent Claim 13, Morscheck does not expressly disclose *the method as described in claim 1 further comprising after said step (h), the step of incorporating the retrieved rule into the electronic form.*

Larcheveque teaches *the step of incorporating the retrieved rule into the electronic form* (0091; Larcheveque teaches the validation tool enables the developer to create custom rules by allowing the developer to choose from preset validation rules. Thus, retrieving the selected rule from the rules repository for incorporation into the electronic form.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Regarding dependent Claims 14 and 31, Morscheck discloses *the method wherein said incorporating step further comprises:*

identifying a field in the electronic form (col. 1 , line 52-col. 3 , lines 12;

Morscheck discloses an interface programmed to capture form design data

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representative of a forms order entered at the interface. Thus, identifying a field in the electronic form.).

attaching the selected rule to the identified form field (col. 1 , line 52-col. 3 , lines 12; Morscheck discloses an validation engine, which is in communication with the form interface, wherein the form design data is compared to a set of validation rules.).

retrieving validation software for the attached rule (col. 1 , line 52-col. 3 , lines 12; Morscheck discloses an validation engine, which is in communication with the form interface, wherein the form design data is compared to a set of validation rules.).

Morscheck in view of Larcheveque does not expressly disclose *automatically installing validation software for an attached rule*.

Tsao teaches *automatically installing validation software for an attached rule* (col. 24, lines 1-11; Tsao teaches a data form may be automatically generated from a database schema information, and the fields in the data form may contain various validations rules based on data in the DOORS system. Thus Tsao teaches *automatically installing software for an attached rule*.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Tsao with Morscheck in view of Larcheveque for the benefit of providing a repository wherein data objects contain link type code. (col. 4, lines 58-59; col. 9, lines 49-55).

Regarding dependent Claim 28, Morscheck discloses *the computer program product as described in claim 23 wherein said retrieving instructions (h) further comprise:*

instructions for receiving a description of a desired rule, the description containing the rule category (col.1, lines 52-65; col. 23, lines 53-67; Morscheck discloses the second computer is remote from the first computer and in communication with the first computer and is programmed to validate the forms order by comparing the form design data with a set of validation rules. Therefore it would have been obvious that the step of *receiving a validation rule description* would occur during when comparing the form design data with a set of validation rules.).

instructions for searching the repository for rules matching the rule description (col.1, lines 52-65; col. 23, lines 53-67; Morscheck discloses the second computer is remote from the first computer and in communication with the first computer and is programmed to validate the forms order by comparing the form design data with a set of validation rules. Therefore it would have been obvious that the step of *receiving a validation rule description* would occur during when comparing the form design data with a set of validation rules.).

Morscheck does not expressly disclose *instructions for displaying all rules matching the rule description; and*

instructions for retrieving a rule selected from the displayed rules matching the rule description.

Larcheveque teaches *instructions for displaying all rules matching the rule description* (0095-0102; 0107-0109; Larcheveque teaches a real-time validation tool which allows the developer to choose a validation rule from a list or preset validation rules or create validation rule for a data-entry field in an electronic form. Larcheveque further teaches displaying a list of preset validation rules through a prelist validation list.).

instructions for retrieving a rule selected from the displayed rules matching the rule description (0095-0102; 0107-0109; Larcheveque teaches a real-time validation tool which allows the developer to choose a validation rule from a list or preset validation rules or create validation rule for a data-entry field in an electronic form. Larcheveque further teaches displaying a list of preset validation rules through a prelist validation list.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

Regarding dependent Claim 29, this claim recites subject matter that is similar to Independent Claim 1. Therefore it is rejected based on the same rationale as given in Independent Claim 1.

Regarding dependent Claim 30, Morscheck does not expressly disclose *the computer program product as described in claim 23 further comprising after said retrieving instructions (h), instructions for incorporating the retrieved rule into the electronic form.*

Larcheveque teaches *instructions for incorporating the retrieved rule into the electronic form* (0091; Larcheveque teaches the validation tool enables the developer to create custom rules by allowing the developer to choose from preset validation rules. Thus, retrieving the selected rule from the rules repository for incorporation into the electronic form.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Morscheck with Larcheveque for the benefit of creating a real-time validation tool which notifies a user of an error as it is entered into a structured data file's electronic form. (0012).

NOTE

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the reference should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon

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for all that it would have reasonably suggested to one having ordinary skill in the art.

See MPEP 2123.

Response to Arguments

Applicant's arguments filed 24 Sep 2008 have been fully considered but they are not persuasive.

Applicant argues *"the design data in Morscheck is not a description of a rule, but is the specification for an order form. Any comparison step in Morscheck is to determine the forms order by comparing the form design data with a set of validation rules."*

In response to applicant's argument that *the design data* is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case the valid form design data which is compared to a set of validation rules, would match the description data of the corresponding validation rule. Thus using the broadest reasonable interpretation, it would have obvious to one of ordinary skill in the art that the valid design description data and the description data describing the validation would be the same.

Applicant argues *“Larcheveque does not provide the ability to link software instructions that implement validation rules to records in the repository that correspond to each validation rule; or the ability to automatically install software instructions that execute the selected validation rule.”*

In response to applicant's argument that Larcheveque fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not cited in the current or previous rejection as been taught in the Larcheveque reference. Thus applicant's argument is moot.

Applicant argues *“Tsao does not describe a step of automatically installing instructions that execute the selected validation rule.”*

The Examiner disagrees.

Tsao teaches a data form may be automatically generated from the database schema information, and the fields in the data form may contain various validations rules based on data in the DOORS system. Tsao also teaches a database table with data that is synchronized with DOORS data in which any piece of data accessible from a database can be stored in a DOORS cell and its link maintained so that the data can be used just as any other data in the DOORS system. Tsao further teaches a data object repository system in which data objects contains link, attributes and information about operations and how these operations are applied to the linked data object to arrive at respective values or content of such data objects, for example links to

components may be included in desk top publishing pages and formatting requirements (validation rules) for composing a final page. Therefore the Examiner concludes that when the form is automatically generated, the corresponding instructions that execute the selected validation rule would also be automatically generated and installed in the form/web page (col. 9, lines 49-67; col. 23, line 1- col. 24, line 38).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James J. Debrow whose telephone number is 571-272-5768. The examiner can normally be reached on 8:00-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAMES DEBROW
EXAMINER
ART UNIT 2176

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